

Appl. No. 10/034,079
Amdt. dated June 1, 2004
Reply to Office Action of April 6, 2004

REMARKS/ARGUMENTS

Pursuant to 37 C.F.R. § 1.116, reconsideration of the present application in view of the foregoing amendments and the following remarks is respectfully requested.

Applicants' attorney thanks the Examiner for her comments and for her thoughtful analysis of the references. Claims 1-6, 8-17, and 19-20 are presented for the Examiner's consideration.

Independent claims 1, 19, and 20 have been amended to require that the dielectric heating energy receptive additive is selected from the group consisting of ferrite, tin oxide, silicon carbide, calcium chloride, zircon, magnetite, alumina, and magnesium oxide. No new matter has been added by these amendments, and support can be found in originally filed claim 7, and in the specification on page 22, lines 1-23.

Independent claim 1 has been amended to clarify the requirement of an electromagnetic energy absorbing fiber comprising a dielectric heating energy receptive additive. No new matter has been added by this amendment, and support can be found in originally filed claim 1 and in the specification on page 17, lines 18-21.

Independent claim 19 has been amended to clarify the requirement of an electromagnetic energy absorbing fiber comprising a synthetic polymer and a dielectric heating energy receptive additive. No new matter has been added by this amendment, and support can be found in originally filed claim 19 and in the specification on page 17, lines 18-21.

Independent claim 20 has been amended to clarify the requirement of an electromagnetic energy absorbing fiber comprising a dielectric heating energy receptive additive. No new matter has been added by this amendment, and support can be found in originally filed claim 20 and in the specification on page 17, lines 18-21.

Claims 7 and 18 have been canceled.

Claims 10 and 14 have been amended to depend from claim 1 rather than canceled claim 7.

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By way of the Office Action mailed April 6, 2004, the Examiner rejected claims 1-11, 14, and 16-19 under 35 U.S.C. § 102(b) as allegedly being anticipated and thus unpatentable over U.S. Patent Number 5,916,506 to Breznak et al. This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Breznak et al. describe a bicomponent fiber having a sheath/core structure where *carbon black* is dispersed in the sheath component (column 2, lines 54-61). The additive is present in an amount of at least 3% and preferably in an amount of about 5% to about 15% (column 3, lines 54-55).

In contrast, amended independent claim 1 of the present invention claims an electromagnetic energy absorbing fiber comprising a dielectric heating energy receptive additive wherein the fiber has a dielectric loss of between 0.5 to 15. Amended independent claim 19 of the present invention claims an electromagnetic energy absorbing fiber comprising a synthetic polymer and a dielectric heating energy receptive additive in an amount between 5 and 15 weight percent wherein said fiber has a dielectric loss of at least 0.5. Both of these amended independent claims further include the limitations that the energy receptive additive is capable of absorbing electromagnetic energy at a frequency within the range of 0.01 to 300 GHz and melting the fiber in less than one second, and that the dielectric heating energy receptive additive is selected from the group consisting of ferrite, tin oxide, silicon carbide, calcium chloride, zircon, magnetite, alumina, and magnesium oxide.

Breznak et al. do not contemplate *electromagnetic* energy absorption, but rather focus on antistatic properties of electrical conductors (column 1, lines 5-7). Breznak et al. also do not teach a fiber melting in less than one second when exposed to electromagnetic energy at a frequency within the range of 0.01 to 300 GHz. Additionally, Breznak et al. do not disclose a dielectric heating energy receptive additive selected from the group consisting of ferrite, tin oxide, silicon carbide, calcium chloride, zircon, magnetite, alumina, and magnesium oxide, but rather focus on *carbon black* as an electrical conductive additive (column 5, lines 31-33). Claims 2-11, 14, and 16-18 are dependent upon claim 1 and thus contain all of the limitations of claim 1. For at least these reasons, Applicants respectfully submit that Breznak et al. do not teach each and every aspect of the claimed invention, as amended. Applicants respectfully request that the rejection be withdrawn.

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By way of the Office Action mailed April 6, 2004, the Examiner rejected claims 1-20 under 35 U.S.C. § 102(b) as allegedly being anticipated and thus unpatentable over U.S. Patent Number 3,803,453 to Hull. This rejection is respectfully traversed to the extent that it may apply to the presently presented claims.

Hull describes a bicomponent fiber having a sheath/core structure where *carbon black* is dispersed in the core in an amount of 15-50% by weight and the sheath contains titanium dioxide in an amount of 2 to 7% by weight (column 2, lines 30-61; column 4, lines 13-23; and claim 7).

In contrast, the amended claims of the present invention pertain to an *electromagnetic* energy absorbing fiber comprising a dielectric heating energy receptive additive selected from the group consisting of ferrite, tin oxide, silicon carbide, calcium chloride, zircon, magnetite, alumina, and magnesium oxide, wherein the fiber has a dielectric loss of at least 0.5 and is capable of absorbing electromagnetic energy at a frequency within the range of 0.01 to 300 GHz so that the fiber melts in less than one second. In one example, the fiber may also comprise a synthetic polymer.

Hull does not contemplate *electromagnetic* energy absorption, but rather focuses on electrical conductive and antistatic properties of a sheath/core configuration (column 1, lines 30-61 and column 5, lines 61-65). Hull also does not teach a fiber melting in less than one second when exposed to electromagnetic energy at a frequency within the range of 0.01 to 300 GHz. Additionally, Hull does not disclose a dielectric heating energy receptive additive selected from the group consisting of ferrite, tin oxide, silicon carbide, calcium chloride, zircon, magnetite, alumina, and magnesium oxide, but rather focuses on *carbon black* as an electrical conductive additive (column 4, lines 13-23). For at least these reasons, Applicants respectfully submit that Hull does not teach each and every aspect of the claimed invention, as amended. Applicants respectfully request that the rejection be withdrawn.

For the reasons stated above, it is respectfully submitted that all of the presently presented claims are in form for allowance.

Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

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Respectfully submitted,

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CERTIFICATE OF FACSIMILE

I, Judith M. Anderson, hereby certify that on June 1, 2004 this document is being facsimile transmitted to the United States Patent and Trademark Office, Alexandria, VA 22313-1450.

By: 

Judith M. Anderson